

REMARKS/ARGUMENT

I. General Remarks.

Claims 1-39 and 87-113 are pending in the present application; claims 40-86, 114-119, and 120-122 were withdrawn in response to a previously-issued restriction requirement. Claims 37, 39 and 109 are amended herein.

II. Remarks Regarding the Rejections of Certain Claims Under 35 U.S.C. § 112, 2nd Paragraph.

A. Rejection of Claims 1 and 87 Pertaining to the Term “Particle Size Distribution Adjusting Agent.”

The Examiner has stated:

Claims 1 and 87 are indefinite because applicants do not particularly point out and distinctly claim what they mean by particle size distribution adjusting agent. It is the examiner's position that it would appear this should be at the very least a cationic polymer, yet it is not in any of applicants' independent claims. The claimed particle size distribution adjusting agent, it is noted, can merely read upon water or other material.

(Office Action, at 2.)

Applicants respectfully traverse the Examiner's rejection. Applicants respectfully assert that the subject claims are sufficiently definite under 35 U.S.C. 112, 2nd paragraph, because the term “particle size distribution adjusting agent” is clearly defined in the specification, and is not ambiguous. The term “particle size distribution adjusting agent” refers to any compound that, when added to a settable fluid, adjusts the distribution of the sizes of particles in the settable fluid. This is made clear in Applicants' specification, where Applicants state that “[t]he particle-size distribution adjusting agent . . . may be any compound that desirably affects the particle-size distribution of the settable fluid such that the settable fluid's rheology remains desirably stable for a chosen period of time.” (Specification, paragraph 0027.) Applicants respectfully submit that this definition is clear and unambiguous. Accordingly, Applicants respectfully submit that those of ordinary skill, having read Applicants' disclosure, readily will recognize the scope of the subject matter embraced by Applicants' claims 1 and 87.

Regarding the Examiner's comment that Applicants must include "cationic polymer" in their independent claims, a cationic polymer is only an example of a particle-size distribution-adjusting agent. Applicants need not limit their claims to only one embodiment disclosed in the specification. *In re Rasmussen*, 650 F.2d 1212, 1215 (C.C.P.A. 1981) ("[A] claim may be broader than the specific embodiment disclosed in a specification.")

As to the Examiner's comment that the term "particle-size distribution-adjusting agent" could read on water, Applicants respectfully assert that it could not. For example, for a given aqueous slurry of compounds having a given particle size distribution, the addition of water will only dilute the slurry. The size distribution of particles within the slurry will be entirely unaffected by the addition of water. Accordingly, water is not a particle-size distribution-adjusting agent, as that term is used in Applicants' application.

Because Applicants have shown that claims 1 and 87 meet the requirements of definiteness under 35 U.S.C. § 112, second paragraph, without the need for further amendment to such claims, Applicants respectfully request that this rejection be withdrawn, and earnestly solicit a timely Notice of Allowance for these claims, and claims dependent therefrom.

B. Rejection of Claims 1 and 87 Pertaining to Absence of "Critical Amounts" of Each Component.

The Examiner has stated:

Claims 1 and 87 may also potentially be considered indefinite because applicants do not provide the critical amounts of each component in their independent claim for their invention.

(Office Action, at 2.)

Applicants respectfully assert that 35 U.S.C. § 112, 2nd paragraph does not require Applicants to recite specific amounts or concentration for any component present in either independent claim 1 or 87. The MPEP reflects this in Section 2173.04:

Breadth of a claim is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from

that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph.

(MPEP 2173.04.) Here, Applicants' claims 1 and 87 recite "a cement composition comprising a hydraulic cement, a set retarder, and a particle-size distribution-adjusting agent." The subject matter of these claims is clear. Inclusion of specific amounts or concentrations for the recited components is not necessary for the claims to be termed definite under 35 U.S.C. § 112, second paragraph. Applicants are not required to limit the scope of their claims to preferred embodiments, and therefore need not recite specific amounts or concentrations in their independent claims. Applicants respectfully request that this rejection be withdrawn, and earnestly solicit a timely Notice of Allowance for these claims, and claims dependent therefrom.

C. Rejection of Claims 5 and 91 Pertaining to the Term "High Alkalinity."

The Examiner has stated:

The term "high alkalinity" (reference to cement) is vague in claim 5 and 91. Is this a term well known in the art and what cements are considered high alkalinity cements?

(Office Action, at 2.)

The term "high alkalinity cement" is a term recognized in the art. The literature in the art often refers to certain cements as being highly alkaline, as may be discerned from inspection of the titles of, for example, the following references: Z. Owsiak, "Alkali-aggregate reaction in concrete containing high-alkali cement and granite aggregate," *Cem. Concr. Res.*, 34(1):7-11 (2004); J. Davidovits, "High-alkali cements for 21st century concretes," *Fr. Am. Concr. Inst., SP-144(Concrete Technology)*, 383-97 (1994); Yu. I. Benshtein, et al., "Evaluation of the effectiveness of silica additives added to high-alkaline cement for preventing internal corrosion of concrete," *Zhurnal Prikladnoi Khimii*, 60(2):349-55 (1987). Because Applicants have provided evidence that the term "high alkalinity cement" is a term recognized in the art, Applicants respectfully request that the rejection of claims 5 and 91 under 35 U.S.C. § 112 be withdrawn, and earnestly solicit a timely Notice of Allowance for these claims.

D. Rejection of Claim 7 Pertaining to the Term “High-Density.”

The Examiner has stated:

The term “high” density particles in claim 7 and any other claim it appears is vague, relative, and indefinite. What do applicants mean by “high”? Please be specific and provide an exact range of density that applicants categorize as high.

(Office Action, at 2.)

Applicants respectfully submit that “high-density particles” is sufficiently definite to comply with 35 U.S.C. § 112. One of ordinary skill in the art, with the benefit of Applicants’ disclosure, readily would ascertain from Applicants’ disclosure that “high-density particles” (as recited in claim 7) describes particles that may be added to a settable fluid to increase the settable fluid’s density (*e.g.*, particles that are heavier than the settable fluid to which the particles are to be added). This is consistent with the way the term “high-density particles” is used in claim 7, which recites that the high-density particles may be added to a cement composition to densify it. It also is consistent with the way that the term “high density particles” is used in Applicants’ specification, which states:

In certain exemplary embodiments of the present invention, the settable fluid may be formulated as a “densified” settable fluid (*e.g.*, formulated with a significantly higher density than that which is calculated to be necessary for its intended use) before the addition of the activator composition. Such a densified settable fluid may be provided in a variety of ways, such as through the addition of high-density particles, or by formulating the settable fluid with less water than necessary for its intended use.

(Specification, paragraph 0035.)

“The fact that claim language . . . may not be precise, does not automatically render the claim indefinite under 35 U.S.C. § 112, second paragraph. Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.” *See* MPEP § 2173.05(b) (citations omitted). For example, a limitation such as “an effective amount” has been held to be sufficiently definite when read in light of the supporting disclosure and in the absence of any prior art which would give rise to uncertainty about the scope of the claim. *See* MPEP § 2173.05(c) (citing *Ex parte Skuballa*, 12

U.S.P.Q.2d 1570 (Bd. Pat. App. & Inter. 1989)). Here, Applicants are aware of no prior art that would create any uncertainty as to the scope of the subject claims.

Accordingly, Applicants respectfully assert that the use of the term “high-density particles” in the subject claims satisfies the requirements of 35 U.S.C. § 112, second paragraph. Applicants respectfully request the withdrawal of this rejection, and earnestly solicit the timely issuance of a Notice of Allowance for this claim.

E. Rejection of Claims 1, 28, 105 and 107 Pertaining to the Term “Desired.”

With respect to claims 1, 28, 105, and 107, the Examiner writes that “the use of the term ‘desired’ renders the claim vague and indefinite.” Office Action, at 3. Applicants respectfully submit that this language is sufficiently definite to comply with 35 U.S.C. § 112. As noted above, “[t]he fact that claim language . . . may not be precise, does not automatically render the claim indefinite under 35 U.S.C. § 112, second paragraph. Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.” See MPEP § 2173.05(b) (citations omitted). Here, Applicants are aware of no prior art that would create any uncertainty as to the scope of the subject claims. Rather, one of ordinary skill in the art readily would ascertain, in light of Applicants’ disclosure, that “placing the cement composition in a desired location” (as recited in claims 1, 28, 105, and 107) describes placement of the cement composition in a location in which the cement composition’s presence is desired, *e.g.*, a location effective to accomplish the objectives of that particular use of the cement composition from among those described in the specification. One of ordinary skill in the art, with the benefit of Applicants’ disclosure, readily would recognize the scope of “placing the cement composition in a desired location.” Accordingly, Applicants respectfully assert that the use of the term “desired” in the subject claims satisfies the requirements of 35 U.S.C. § 112, second paragraph. Applicants respectfully request the withdrawal of the rejection thereunder against claims 1, 28, 105, and 107, and earnestly solicit the timely issuance of a Notice of Allowance for these claims.

F. Rejection of Claims 37 and 109 Pertaining to the Use of a Colon.

With respect to claims 37 and 109, the Examiner advises the removal of the colon therein. Applicants have amended these claims accordingly. Applicants respectfully request the

withdrawal of this rejection, and earnestly solicit the timely issuance of a Notice of Allowance for these claims.

G. Rejection of Claim 39 Pertaining to the Phrase “Selectively Activating.”

Applicants have removed the term “selectively” from claim 39. Applicants respectfully request the withdrawal of this rejection, and earnestly solicit the timely issuance of a Notice of Allowance for this claim.

III. Remarks Regarding Rejections of Claims 1-39 and 87-113 Under 35 U.S.C. §§ 102/103.

The Examiner has rejected claims 1-39 and 87-113 under 35 U.S.C. 102 (a and b) as anticipated by U.S. Patent Nos. 6,089,318 to Laramay et al (the “Laramay” reference), 6,172,147 to Abelleira et al (the “Abelleira” reference), 6,087,418 to Yamashita et al (the “Yamashita” reference), 5,016,711 to Cowan (the “Cowan ‘711” reference), 5,275,654 to Cowan (the “Cowan ‘654” reference) and 5,298,070 to Cowan (the “Cowan ‘070” reference). Alternatively, the Examiner has rejected claims 1-39 under 35 U.S.C. 103 in view of the above-cited references. Regarding these references, the Examiner asserts:

All of the above cited references teach compositions comprising hydraulic cement, retarder, water, and cationic surfactant that are mixed together thus anticipating the applicants’ claimed method (of merely mixing components and placing at a desired location) and product.

(Office Action, at 4.) Because the Examiner has not stated that a combination of these references forms the basis for this rejection, Applicants have treated each cited reference individually below.

A. *Laramay* Does Not Teach or Suggest All Elements of the Claims as Required to Anticipate or Obviate the Claims.

Laramay does not teach or suggest all elements of Applicants’ independent claims 1 and 87. In particular, *Laramay* fails to teach or suggest compositions that comprise a particle-size distribution-adjusting agent. *Laramay* also fails to disclose the step of activating the cement composition, which is required by Applicants’ claim 1.

1. *Laramay* Fails to Disclose Compositions Comprising Particle-Size Distribution-Adjusting Agents.

Applicants' claims 1 and 87 recite the use of compositions comprising particle-size distribution-adjusting agents. Applicants' Specification states that certain cationic polymers may constitute particle-size distribution-adjusting agents. Accordingly, to anticipate or obviate the subject claims, *Laramay* must teach or suggest compositions that comprise either cationic polymers, or other compounds that inherently or expressly constitute particle-size distribution adjusting agents. *Laramay* discloses none of these.

Laramay only discloses cement compositions that may comprise "various anionic, cationic, nonionic and other surface active compounds," (*Laramay*, Col. 11, ll. 12-15). Nowhere does *Laramay* expressly state that these compounds are particle-size distribution-adjusting agents. Nor has the Examiner provided any evidence to show that cationic surface active compounds inherently would constitute particle-size distribution-adjusting agents. Nor are these compounds cationic polymers. Cationic "surface active compounds," or surfactants, typically are low-molecular-weight compounds (typically < 1,000 MW). In contrast, cationic polymers typically are high-molecular-weight compounds (typically having a molecular weight ranging from at least 10,000 to several million). Thus, *Laramay*'s cationic surface active compounds do not constitute particle-size distribution-adjusting agents as required by the subject claims.

Laramay does disclose the use of polymers in a cement composition—a polymer composition made by reacting a vinylamide morpholine derivative with a styrene sulfonic salt. (*Laramay*, Col. 6, ll. 39-45.) However, these polymer compositions are not cationic; thus, they are not cationic polymers. Nor is there any suggestion that these polymer compositions constitute particle-size distribution-adjusting agents as required by the subject claims.

2. *Laramay* Fails to Disclose the Step of Activating a Cement Composition, as Required by Applicants' Claim 1.

Applicants' claim 1 recites the step of "activating the cement composition." *Laramay* nowhere discloses the activation of a cement composition, nor does *Laramay* suggest any suitable activators.

3. The Rejection Based on *Laramay* Should Be Removed.

Because *Laramay* fails to teach or suggest compositions comprising particle-size distribution-adjusting agents, *Laramay* cannot anticipate or obviate Applicants' independent

claims 1 or 87. *Laramay*'s failure to teach or suggest the activation of a cement composition further emphasizes the differences between the *Laramay* disclosure and Applicants' independent claim 1, and underscores that the rejection based on *Laramay* should be removed.

B. *Abelleira* Does Not Teach or Suggest All Elements of the Claims as Required to Anticipate or Obviate the Claims.

Abelleira does not teach or suggest all elements of Applicants' independent claims 1 and 87. In particular, *Abelleira* fails to teach or suggest the step of providing a composition that comprises a particle-size distribution-adjusting agent. *Abelleira* also fails to disclose the step of activating the cement composition, which is required by Applicants' claim 1.

1. *Abelleira* Fails to Disclose Compositions Comprising Particle-Size Distribution-Adjusting Agents.

Applicants' claims 1 and 87 recite the use of compositions comprising particle-size distribution-adjusting agents. Applicants' Specification states that certain cationic polymers may constitute particle-size distribution-adjusting agents. Accordingly, to anticipate or obviate the subject claims, *Abelleira* must teach or suggest compositions that comprise either cationic polymers, or other compounds that inherently or expressly constitute particle-size distribution adjusting agents. *Abelleira* discloses none of these.

Abelleira only discloses mortar cement additives that comprise "cationic AEAs [air-entraining agents] such as amine ethoxylates and amine oxides." (*Abelleira*, Col. 4, ll. 1-2.) Nowhere does *Abelleira* expressly state that these cationic AEAs are particle-size distribution-adjusting agents. Nor has the Examiner provided any evidence to show that cationic AEAs inherently would constitute particle-size distribution-adjusting agents. Lastly, cationic AEAs are not cationic polymers. For example, neither of the cationic AEAs disclosed in *Abelleira*—amine ethoxylate or amine oxide—are polymers. These cationic AEAs are single molecules; they are not polymers made from repeating units of a monomer. *Abelleira*'s cationic AEAs simply are not cationic polymers. For the reasons stated above, *Abelleira*'s cationic AEAs are not particle-size distribution-adjusting agents as required by the subject claims.

2. *Abelleira*'s "Ionically-Soluble Polymers" Cannot Be Cationic Polymers Within a Cement Composition.

Abelleira also discloses "a multi-stage polymer comprising a hydrophobically-modified, ionically-soluble polymer stage." (*Abelleira*, Col. 3, ll. 8-9). *Abelleira* does not

disclose this ionically-soluble polymer as being a particle-size distribution-adjusting agent, nor has the Examiner provided any evidence to show it as such. *Abelleira* further describes this ionically-soluble polymer by stating:

the ionically-soluble polymer is physically or chemically attached to the polymer particle such that, upon neutralizing the ionically-soluble polymer with base or acid, at least a portion of said ionically-soluble polymer remains attached to the remainder of the polymer particle.

(*Abelleira*, Col. 3, ll. 44-49). Accordingly, *Abelleira* does not disclose that this ionically-soluble polymer is cationic. Nonetheless, because *Abelleira*'s polymer is ionically-soluble, it will become cationic or anionic depending on its environment, thus *Abelleira*'s polymer could become cationic if neutralized with acid. However, even assuming that *Abelleira*'s polymer was placed in a cationic state (e.g., assuming it was acid-neutralized), it could not remain cationic once exposed to the highly basic environment of a cement compositions, such as those used in Applicants' present invention. To the contrary, once placed in a cement composition, *Abelleira*'s ionically-soluble cationic polymer would become neutral or non-ionic. In contrast, the cationic polymers that are disclosed to be particle-size distribution-adjusting agents in Applicants' present invention behave differently—their cationic nature is not dependent upon the surrounding environment.

3. *Abelleira* Does Not Disclose the Step of Activating a Cement Composition, as Required by Applicants' Claim 1.

Applicants' claim 1 recites the step of "activating the cement composition." *Abelleira* nowhere discloses the activation of a cement composition, nor does *Abelleira* suggest any suitable activators.

4. The Rejection Based on *Abelleira* Should Be Removed.

Because *Abelleira* fails to teach or suggest compositions comprising particle-size distribution-adjusting agents, *Abelleira* cannot anticipate Applicants' independent claims 1 or 87. *Abelleira* failure to teach or suggest the activation of a cement composition (as required by claim 1) further underscores that the rejection based on *Abelleira* should be removed.

C. *Yamashita* Does Not Teach or Suggest All Elements of the Claims as Required to Anticipate or Obviate the Claims.

Yamashita does not teach or suggest all elements of Applicants' independent claims 1 and 87. In particular, *Yamashita* fails to teach or suggest the step of providing a composition that comprises a particle-size distribution-adjusting agent. *Yamashita* also fails to disclose the step of activating the cement composition, which is required by Applicants' claim 1.

1. *Yamashita* Fails to Disclose Compositions Comprising Particle-Size Distribution-Adjusting Agents.

Applicants' claims 1 and 87 recite the use of compositions comprising particle-size distribution-adjusting agents. Applicants' Specification states that certain cationic polymers may constitute particle-size distribution-adjusting agents. Accordingly, to anticipate or obviate the subject claims, *Yamashita* must teach or suggest compositions that comprise either cationic polymers, or other compounds that inherently or expressly constitute particle-size distribution adjusting agents. *Yamashita* discloses none of these.

Yamashita only discloses cement compositions that may comprise "various kinds of cationic surface active agents such as alkylamine acetate and alkyltrimethylammonium chloride." (*Yamashita*, Col. 18, ll. 54-56.) Nowhere does *Yamashita* expressly state that these cationic surface active agents are particle-size distribution-adjusting agents. Nor has the Examiner provided any evidence to show that cationic surface active agents inherently would constitute particle-size distribution-adjusting agents. Nor are these compounds cationic polymers. For example, neither of the two cationic surface active agents disclosed in *Yamashita*—alkylamine acetate and alkyltrimethylammonium chloride—are polymers. Indeed, cationic "surface active agents," or surfactants, typically are low-molecular-weight compounds (typically < 1,000 MW). In contrast, cationic polymers typically are high-molecular-weight compounds (typically having a molecular weight ranging from at least 10,000 to several million). Thus, *Yamashita's* cationic surface active agents are not cationic polymers.

Yamashita does disclose the presence of polymer compounds in a cement composition. (Col. 2, ll. 53--Col. 3, ll. 60.) However, none of these polymer compounds are inherently or expressly cationic. Nor is there any suggestion that these polymer compounds constitute particle-size distribution-adjusting agents as required by the subject claims.

For the reasons stated above, *Yamashita* fails to disclose compositions comprising particle-size distribution-adjusting agents, as required by Applicants' independent claims.

2. *Yamashita* Does Not Disclose the Step of Activating a Cement Composition, as Required by Applicants' Claim 1.

Additionally, Applicants' claim 1 recites the step of "activating the cement composition." *Yamashita* nowhere discloses the activation of a cement composition, nor does *Yamashita* suggest any suitable activators.

3. The Rejection Based on *Yamashita* Should Be Removed.

Because *Yamashita* fails to teach or suggest compositions comprising particle-size distribution-adjusting agents, *Yamashita* cannot anticipate Applicants' independent claims 1 or 87. *Yamashita*'s failure to teach or suggest the activation of a cement composition (as required by claim 1) further underscores that the rejection based on *Yamashita* should be removed.

D. *Cowan* '711 Does Not Teach or Suggest All Elements of the Claims as Required to Anticipate or Obviate the Claims.

Cowan '711 does not teach or suggest all elements of Applicants' independent claims 1 and 87. In particular, *Cowan* '711 fails to teach or suggest the step of providing a composition that comprises a particle-size distribution-adjusting agent. *Cowan* '711 also fails to disclose the step of activating the cement composition, which is required by Applicants' claim 1.

1. *Cowan* '711 Fails to Disclose Compositions Comprising Particle-Size Distribution-Adjusting Agents.

Applicants' claims 1 and 87 recite the use of compositions comprising particle-size distribution-adjusting agents. Applicants' Specification states that certain cationic polymers may constitute particle-size distribution-adjusting agents. Accordingly, to anticipate or obviate the subject claims, *Cowan* '711 must teach or suggest compositions that comprise either cationic polymers, or other compounds that inherently or expressly constitute particle-size distribution adjusting agents. *Cowan* '711 discloses none of these.

Cowan '711 only discloses cement compositions that comprise surfactants, which may be "anionic, amphoteric, cationic, nonionic or blends thereof, *e.g.*, nonionics with anionic or cationic surfactants." (*Cowan* '711, Col. 5, ll. 23-26.) The specific cationic surfactants that are disclosed are "dimethyl dicoco ammonium chloride, cetyl dimethyl benzyl ammonium chloride, cetyl dimethyl ammonium chloride." (*Cowan* '711, Col. 6, ll. 65-68.) Nowhere does *Cowan*

'711 expressly state that these cationic surface active agents are particle-size distribution-adjusting agents. Nor has the Examiner provided any evidence to show that cationic surface active compounds inherently would constitute particle-size distribution-adjusting agents. Lastly, none of the cationic surfactants disclosed in *Cowan '711* are cationic polymers. They are single molecules; they are not polymers made from repeating units of a monomer. Thus, *Cowan '711* does not disclose the use of cationic polymers in cement compositions. For the reasons stated above, *Cowan '711* fails to disclose compositions comprising particle-size distribution-adjusting agents, as required by Applicants' independent claims.

2. *Cowan '711* Does Not Disclose the Step of Activating a Cement Composition, as Required by Applicants' Claim 1.

Additionally, Applicants' claim 1 recites the step of "activating the cement composition." *Cowan '711* nowhere discloses the activation of a cement composition, nor does *Cowan '711* suggest any suitable activators.

3. The Rejection Based on *Cowan '711* Should Be Removed.

Because *Cowan '711* fails to teach or suggest compositions comprising particle-size distribution-adjusting agents, *Cowan '711* cannot anticipate Applicants' independent claims 1 or 87. *Cowan '711*'s failure to teach or suggest the activation of a cement composition (as required by claim 1) further underscores that the rejection based on *Cowan '711* should be removed.

E. *Cowan '654* Does Not Teach or Suggest All Elements of the Claims as Required to Anticipate or Obviate the Claims.

Cowan '654 does not teach or suggest all elements of Applicants' independent claims 1 and 87. *Cowan '654* is a divisional patent application of *Cowan '711*. Therefore, the disclosures of *Cowan '654* and *Cowan '711* are identical. Because Applicants have shown that *Cowan '711* does not disclose all the elements of Applicants' independent claims 1 and 87, and because the disclosure of *Cowan '654* is identical to the disclosure of *Cowan '711*, *Cowan '654* cannot disclose all the elements of Applicants' independent claims 1 and 87. The rejection based on *Cowan '654* should be removed.

F. *Cowan* '070 Does Not Teach or Suggest All Elements of the Claims as Required to Anticipate or Obviate the Claims.

Cowan '070 does not teach or suggest all elements of Applicants' independent claims 1 and 87. In particular, *Cowan* '070 fails to teach or suggest the step of providing a composition that comprises a particle-size distribution-adjusting agent. *Cowan* '070 also fails to disclose the step of activating the cement composition, which is required by Applicants' claim 1.

1. *Cowan* '070 Fails to Disclose Compositions Comprising Particle-Size Distribution-Adjusting Agents.

Applicants' Claims 1 and 87 recite the use of compositions comprising particle-size distribution-adjusting agents. Applicants' Specification states that certain cationic polymers may constitute particle-size distribution-adjusting agents. Accordingly, to anticipate or obviate the subject claims, *Cowan* '070 must teach or suggest compositions that comprise either cationic polymers, or other compounds that inherently or expressly constitute particle-size distribution adjusting agents. *Cowan* '070 discloses none of these.

Cowan '070 only discloses cement compositions that comprise surfactants, which may be "anionic, amphoteric, cationic, nonionic or blends of nonionics with anionic or cationic surfactants." (*Cowan* '070, Col. 3, ll. 13-15.) Nowhere does *Cowan* '070 expressly state that these surfactants are particle-size distribution-adjusting agents. Nor has the Examiner provided any evidence to show that these surfactants inherently would constitute particle-size distribution-adjusting agents. Nor are any of the cationic surfactants disclosed in *Cowan* '070 cationic polymers. As has been stated above, cationic surfactants are *not* cationic polymers, much less particle size distribution adjusting agents. Cationic surfactants are single molecules; they are not polymers made from repeating units of a monomer. Cationic surfactants typically are low-molecular-weight compounds (typically < 1,000 MW); in contrast, cationic polymers typically are high-molecular-weight compounds (typically having a molecular weight ranging from at least 10,000 to several million). Thus, the cationic surfactants of *Cowan* '070 are not cationic polymers.

Cowan '070 does disclose the presence of polymer compounds within a cement composition. (*Cowan* '070, Col. 2, l. 62 - Col. 3, l. 7.) However, none of these polymers are cationic polymers. Nor is there any suggestion that these polymer compounds constitute particle-size distribution-adjusting agents as required by the subject claims.

For the reasons stated above, *Cowan '070* fails to disclose compositions comprising particle-size distribution-adjusting agents, as required by Applicants' independent claims.

2. *Cowan '070* Does Not Disclose the Step of Activating a Cement Composition, as Required by Applicants' Claim 1.

Additionally, Applicants' claim 1 recites the step of "activating the cement composition." *Cowan '070* nowhere discloses the activation of a cement composition, nor does *Cowan '070* suggest any suitable activators.

3. The Rejection Based on *Cowan '070* Should Be Removed.

Because *Cowan '070* fails to teach or suggest compositions comprising particle-size distribution-adjusting agents, *Cowan '070* cannot anticipate Applicants' independent claims 1 or 87. *Cowan '070*'s failure to teach or suggest the activation of a cement composition (as required by claim 1) further underscores that the rejection based on *Cowan '070* should be removed.

IV. Rejections of Claims 1-39 and 87-113 for Obviousness-Type Double Patenting

The Examiner has rejected claims 1-39 and 87-113 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,796,378 B2 (Reddy et al.). Applicants are including a timely-filed Terminal Disclaimer, and the appropriate fee, along with this Response, to overcome this rejection. Accordingly, Applicants respectfully request the withdrawal of the rejection thereunder against claims 1-39 and 87-113, and earnestly solicit the timely issuance of a Notice of Allowance for these claims.

**SUMMARY AND PETITION FOR THE EXTENSION OF TIME
TO FILE THIS RESPONSE**


In light of the above amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicants hereby petition under the provisions of 37 C.F.R. §1.136(a) for a one-month extension of time to file this Response. Enclosed herewith is check number 917795 in the amount of \$120.00 for the fee. The Commissioner is hereby authorized to charge Baker Botts L.L.P. (*formerly Baker & Botts, L.L.P.*) Deposit Account No. 02-0383 (Order Number 063718.0359) for any underpayment, or to credit same with any overpayment of fees, in association with this filing.

Applicants believe that there are no additional fees due in association with this filing of this Response. As noted earlier, Applicants have included a timely Terminal Disclaimer, and the Terminal Disclaimer fee, in this mailing. However, should the Commissioner deem that any fees are due, Applicants respectfully request that the Commissioner accept this as a Petition Therefor, and direct that any additional fees be charged to Baker Botts L.L.P.'s Deposit Account No. 02-0383, Order Number 063718.0359.

Respectfully submitted,

BAKER BOTTS L.L.P. (023640)

By: 

Thomas M. Morrow

Reg. No. 55,469

One Shell Plaza

910 Louisiana Street

Houston, Texas 77002-4995

Telephone: 713.229.4006

Facsimile: 713.229.7906

EMail: Tom.Morrow@bakerbotts.com

Date: February 16, 2005